

EAST Search History

| Ref # | Hits | Search Query | DBs | Default Operator | Plurals | Time Stamp |
|-------|------|----------------------------------|-------------------------------------------------------|------------------|---------|------------------|
| S1 | 1 | ("6121504").PN. | USPAT; USOCR | OR | OFF | 2006/12/04 10:09 |
| S2 | 1 | ("6403854").PN. | USPAT; USOCR | OR | OFF | 2006/12/04 10:19 |
| S3 | 614 | 585/809.ccls. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | OFF | 2006/12/04 10:19 |
| S4 | 269 | 585/910.ccls. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | OFF | 2006/12/04 10:19 |
| S5 | 140 | 585/603.ccls. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | OFF | 2006/12/04 10:19 |
| S6 | 120 | 585/609.ccls. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | OFF | 2006/12/04 10:19 |
| S7 | 201 | 585/633.ccls. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | OFF | 2006/12/04 10:19 |
| S8 | 727 | 585/639.ccls. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | OFF | 2006/12/04 10:20 |
| S9 | 7526 | methanol and quench and catalyst | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | ON | 2006/12/04 13:16 |
| S10 | 120 | S8 and S9 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | ON | 2006/12/04 13:03 |

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| S11 | 33 | ("3928483" "4025575" "4044061" "4252479" "4447669" "4496786" "4499314" "4547616" "4677242" "4788042" "4843183" "4851606" "4861938" "4973792" "5095163" "5126308" "5191141").PN. OR ("6403854").URPN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2006/12/04 11:50 |
| S12 | 727 | 585/639.ccls. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | OFF | 2006/12/04 13:03 |
| S13 | 7526 | methanol and quench and catalyst | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | ON | 2006/12/04 13:11 |
| S14 | 120 | S12 and S13 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | ON | 2006/12/04 15:46 |
| S15 | 78 | S14 and stage | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | ON | 2006/12/04 13:03 |
| S16 | 11 | S15 and quench.ab. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | ON | 2006/12/04 13:10 |
| S17 | 3 | methanol and quench and catalyst | EPO; JPO | OR | ON | 2006/12/04 13:15 |
| S18 | 2674 | S13 and \$6stage | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | ON | 2006/12/04 13:18 |
| S19 | 269 | 585/910.ccls. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | OFF | 2006/12/04 13:18 |
| S20 | 7 | S18 and S19 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | ON | 2006/12/04 13:21 |

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| S21 | 1745 | 585/603,609,809,633,639.ccls. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | ON | 2006/12/04 13:22 |
| S22 | 98 | S18 and S21 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | ON | 2006/12/04 13:53 |
| S23 | 11 | S16 and S22 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | ON | 2006/12/04 13:22 |
| S24 | 2036 | quench\$4 near4 stage\$3 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | ON | 2006/12/04 13:55 |
| S25 | 231 | S24 and methanol | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | ON | 2006/12/04 13:55 |
| S26 | 142 | S24 and "585"/\$.ccls. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | ON | 2006/12/04 13:55 |
| S27 | 34 | S26 and quench\$4.ab. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | ON | 2006/12/04 13:56 |
| S28 | 17 | ("1880309" "1938991" "2236534" "2928886" "2945075" "3236905" "3342724").PN. OR ("3674890").URPN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2006/12/04 14:26 |
| S29 | 1 | ("6838578").PN. | USPAT; USOCR | OR | OFF | 2006/12/04 14:27 |
| S30 | 322 | lattner.in. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | OFF | 2006/12/04 14:28 |

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|-----|--------|--------------------------------------------|-------------------------------------------------------|----|-----|------------------|
| S31 | 42261 | oxygenate\$ | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | OFF | 2006/12/04 14:28 |
| S32 | 127 | S30 and S31 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | OFF | 2006/12/04 14:28 |
| S33 | 538 | quench\$ with stripping | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | ON | 2006/12/04 15:47 |
| S34 | 387432 | water and methanol | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | ON | 2006/12/04 15:50 |
| S35 | 94 | S33 and S34 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | ON | 2006/12/04 15:48 |
| S36 | 24 | S35 and "585"/\$.ccls. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | ON | 2006/12/04 15:50 |
| S37 | 888 | quench\$ same stripping same separat\$4 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | ON | 2006/12/04 15:51 |
| S38 | 208 | S37 and "585"/\$.ccls. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | ON | 2006/12/04 15:51 |
| S39 | 1745 | 585/603,609,809,633,639.ccls. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | ON | 2006/12/04 15:52 |
| S40 | 34 | S37 and S39 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | ON | 2006/12/04 15:52 |

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|-----|--------|-----------------------------------------------|-------------------------------------------------------|----|-----|------------------|
| S41 | 218 | quench\$ same water same methanol same olefin | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | ON | 2006/12/05 11:56 |
| S42 | 687351 | remov\$3 with water | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | ON | 2006/12/05 11:57 |
| S43 | 157 | S41 and S42 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | ON | 2006/12/05 11:58 |
| S44 | 21 | S43 and quench\$.ab. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | ON | 2006/12/05 12:37 |
| S45 | 2 | WO-9955650-\$.did. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | ON | 2006/12/05 12:42 |
| S46 | 1 | ("6403854").PN. | USPAT; USOCR | OR | OFF | 2006/12/05 15:40 |
| S47 | 1 | ("6121504").PN. | USPAT; USOCR | OR | OFF | 2006/12/05 13:12 |
| S48 | 1 | ("3674890").PN. | USPAT; USOCR | OR | OFF | 2006/12/05 14:02 |
| S49 | 1 | ("3674890").PN. | USPAT; USOCR | OR | OFF | 2006/12/06 11:24 |
| S50 | 209 | 208/48Q.ccls. | USPAT | OR | OFF | 2006/12/05 15:48 |
| S51 | 4465 | methanol.ab. | USPAT | OR | OFF | 2006/12/05 15:48 |
| S52 | 1 | S50 and S51 | USPAT | OR | OFF | 2006/12/05 15:48 |
| S53 | 1 | S50 and oxygenate | USPAT | OR | OFF | 2006/12/05 15:49 |
| S54 | 116 | 585/535.ccls. | USPAT | OR | OFF | 2006/12/05 15:50 |
| S55 | 0 | S51 and S54 | USPAT | OR | OFF | 2006/12/05 15:49 |
| S56 | 0 | S54 and oxygenate | USPAT | OR | OFF | 2006/12/05 15:49 |
| S57 | 232 | quench adj ring | US-PGPUB; USPAT; USOCR | OR | ON | 2006/12/06 14:25 |
| S58 | 748761 | tubular | US-PGPUB; USPAT; USOCR | OR | ON | 2006/12/06 11:24 |

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| S59 | 68 | S57 and S58 | US-PGPUB; USPAT; USOCR | OR | ON | 2006/12/06 11:25 |
| S60 | 15 | S59 and quench.ab. | US-PGPUB; USPAT; USOCR | OR | ON | 2006/12/06 11:25 |
| S61 | 232 | quench adj ring | US-PGPUB; USPAT; USOCR | OR | ON | 2006/12/06 14:26 |
| S62 | 58 | S61 and pipe and flow | US-PGPUB; USPAT; USOCR | OR | ON | 2006/12/06 14:26 |
| S63 | 26 | ("2754340" "2775629" "2901418" "3498906" "3514264" "3544086" "3593968" "3690839" "3878088" "3907661" "3959420" "4107226" "4150716" "4279733" "4279734" "4444697" "5061408" "5874134" "6019818").PN. OR ("6626424").URPN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2006/12/06 14:33 |
| S64 | 36 | quench with ring with nozzle | US-PGPUB; USPAT; USOCR | OR | OFF | 2006/12/06 14:33 |